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LITIGATION, DISPUTE RESOLUTION

AND RELATED MATTERS

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CALVIN E. THORPE
(1938-1999)

October 21, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith for filing and pursuant to 37 C.F.R. §§ 1.56 and 1.97 is an
Information Disclosure Statement.

Enclosed also are the following designated documents, as required under 37 C.F.R. §§
1.97 and 1.98:

- ☒ Form PTO-1449 list of references submitted for consideration.
- ☒ Legible copies of the listed references or their relevant portions.
- ☐ All English translations of each non-English reference, if any, within the
possession, custody, control or availability of anyone designated in 37 C.F.R. §
1.56(c) (see 37 C.F.R. § 1.98(c)).

The following are included within the Information Disclosure Statement if applicable and
as required under 37 C.F.R. § 1.98:

- ☒ Concise explanation of relevance of each reference not in English and
unaccompanied by an English translation.
- ☐ Statement that certain listed references not enclosed are substantially cumulative
of an enclosed reference.

___ Statement that certain listed references not enclosed were previously cited by or submitted to the Office in the identified prior application which is relied upon for an earlier filing date under 35 U.S.C. § 120.

In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

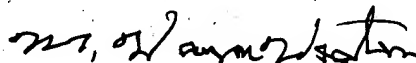
___ Statement under 37 C.F.R. § 1.97(e)(1) or (2).

___ Check No. ___ in the amount of \$ (amount in § 1.17(p)) constituting the submission fee set forth in 37 C.F.R. § 1.17(p).

In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Statement meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 20-0100 of the undersigned.

Dated this 21st day of October, 2002.

Respectfully submitted,



M. Wayne Western
Registration No. 22,788
Attorney for Applicant

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PATENT APPLICATION
DOCKET NO. T5100.CIP2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Chien-Min Sung
SERIAL NO.: 09/935,204
FILED: 08/22/2001
FOR: BRAZED DIAMOND TOOLS AND
METHODS FOR MAKING
ART UNIT: 3723
EXAMINER:
DOCKET NO.: T5100CIP2

**CERTIFICATE OF DEPOSIT
UNDER 37 C.F.R. 1.8**

I hereby certify that this paper or fee is being deposited with the United States Postal Service under 37 C.F.R. § 1.8 on the date indicated above and is addressed to: Box DD, Assistant Commissioner for Patents, Washington, DC 20231.

V. Montague
Signature
Dated *Oct. 20, 2002*

**SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97**

Box: DD
Assistant Commissioner of Patents
Washington, D.C. 20231

RECEIVED
OCT 25 2002
TECHNOLOGY CENTER 10700

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed pursuant to:

 X 37 C.F.R. § 1.97 (b)(1) or (3), within three months of the filing date of the application, or before a first office action on the merits, whichever occurs last;

_____ 37 C.F.R. § 1.97 (c), after a first office action on the merits, but before a Final Office Action or a Notice of Allowance, whichever occurs first, and is accompanied by either 1) a statement in accordance with 37 C.F.R. § 1.97(e), or 2) the fee set forth in § 1.17(p); or

_____ 37 C.F.R. § 1.97 (d), after a Final Office Action or Notice of Allowance, whichever occurs first, but on or before payment of the issue fee, and is accompanied by both 1) a statement in accordance with 37 C.F.R. § 1.97(e), and 2) the fee set forth in § 1.17(p).

While no representation is made that any of these references may be "prior art" within the meaning of that term in accordance with 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each listed reference (or relevant portion thereof) which was not previously submitted to, or cited by, the Patent Office is also enclosed.

For all listed references that are not either in the English language, or accompanied by a translation into English, a concise explanation of relevance as required under 37 C.F.R. § 1.98(a)(3) is enclosed attached to each.

Please charge any additional fees or credit any overpayment to Deposit Account

No. 20-0100.

DATED this 21st day of October, 2002.

Respectfully submitted,



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Enclosures

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PATENT APPLICATION
DOCKET NO. T5100CIP2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Chien-Min Sung
SERIAL NO: 09/935,204
FILED: August 22, 2001
FOR: **BRAZED DIAMOND TOOLS AND
METHODS FOR MAKING THE
SAME**
ART UNIT: 3723
EXAMINER:
DOCKET NO: T5100CIP2

**CERTIFICATE OF DEPOSIT
UNDER 37 C.F.R. §1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, under 37 C.F.R. §1.8 on the date indicated below and is addressed to Assistant Commissioner of Patents, Washington, D.C. 20231.

V. Montague
Oct. 21, 2002
Date of Deposit

STATEMENT OF RELEVANCE UNDER 37 C.F.R. §1.98(a)(3)

Assistant Commissioner for Patents
Washington, D.C. 20231

OCT 25 2002

TECHNOLOGY CENTER R3700

Sir/Madam:

Please find, pursuant to 37 C.F.R. §1.98(a)(3), a concise Statement of Relevance for JP10128654A, JP10180618A, JP11048122A and JP11077536A.

JP10128654A:

This patent contains an invention which utilizes a diamond dresser to groom an abrasive cloth used for polishing purposes in a CMP device. Particularly, the diamond dresser includes a material which is capable of mechanically removing a diamond abrasive grain from the abrasive cloth after it has become dislodged from the diamond dresser. Additionally, the abrasive cloth

includes a dimple or other wear indicator which is used to signify an amount of wear which has occurred to the abrasive cloth.

This patent is relevant to the invention of the present application only in that it discloses a CMP pad dresser which utilizes a plurality of diamond grits or abrasive grains, for dressing a CMP pad.

JP10180618A:

This patent discloses a polishing pad having different areas of roughness to correspond to areas of varying thicknesses on a semiconductor substrate material which is to be polished flat. The degree of roughness corresponds to the thickness, or amount of material to be removed, from the semiconductor substrate. Therefore, the rougher areas of the pad remove material from the semiconductor substrate at a greater rate than those areas which are less rough. In this manner, a uniform and flat surface may be achieved in a more efficient manner. Additionally, diamond grinding wheels having a variety of degrees of hardness are used in order to form the varying degrees of roughness on the pad surface.

This patent relates to the invention of the present application only in that a diamond wheel is brought in contact to the surface of a polishing, or material removing, pad.

JP11048122A:

This patent discloses a CMP polishing pad for polishing semiconductor wafers. The CMP pad is groomed or dressed with two CMP pad dressers. The first CMP pad dresser has a diamond particle containing surface which is used to create a uniform polishing pad surface. The polishing pad then grinds upon the semiconductor wafer, and is next dressed by a second dressing tool

which has a cylindrical brush for rejuvenating the polishing pad. Finally, a supply nozzle is used to restore the abrasives contained in the pad fibers.

This patent relates to the invention of the present application only in that it uses a CMP pad dresser which contains diamond particles for dressing CMP pad. However, the use of the diamond CMP pad dresser in this patent seems to be focused on achieving a uniform polishing pad surface rather than restoring the disposition of pad fibers after they have performed a polishing step.

JP11077536A:

This patent discloses a CMP conditioner with diamond abrasive grains which are fixed by an electroplating method to a plated layer. The electroplating is then coated with a nitric acid resistant plating or synthetic resin so as to allow the chips of the diamond abrasive grains to project above the resin layer.

This patent is relevant to the invention of the present application only in that it discloses a diamond particle containing CMP pad dresser. Further, it is relevant in that it discloses a means for reducing diamond particle displacement due to chemical attack. However, in this instance, a resin layer is employed as the mechanism by which the chemical attack is prevented.

The above statements are believed to fully comply with the requirements of 37 C.F.R. §1.98(a)(3). The Examiner is invited to contact the applicant in the event that there is any deficiency found therein.

DATED this 21st day of October, 2002.

Respectfully submitted,



M. Wayne Western
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